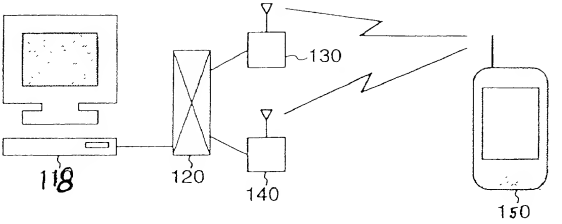
FIG. 1 PRIOR ART



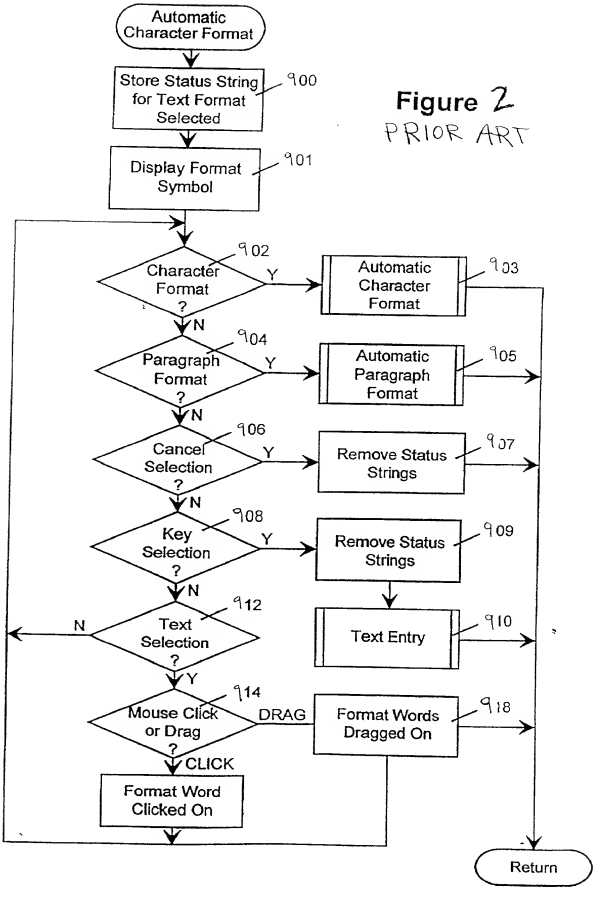


Figure 2
PRIOR ART

DOCKET ZE627660

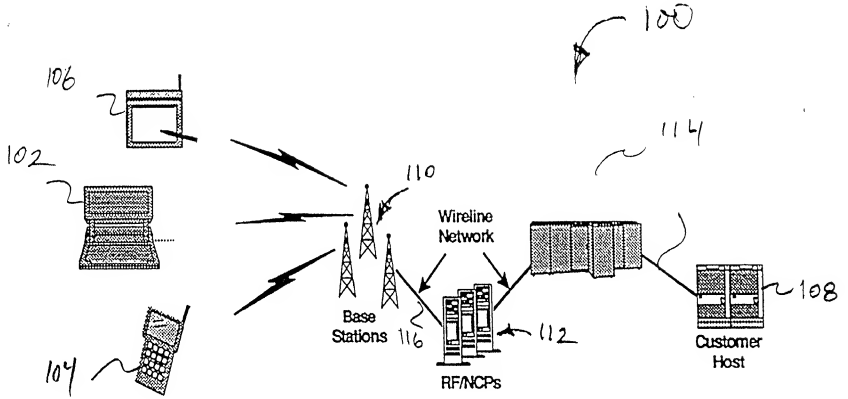


Figure 3

PRIOR ART

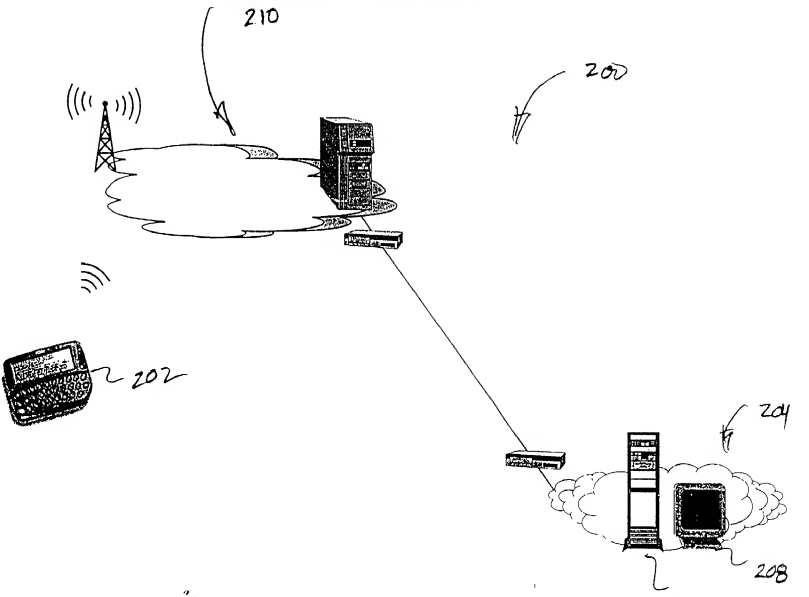
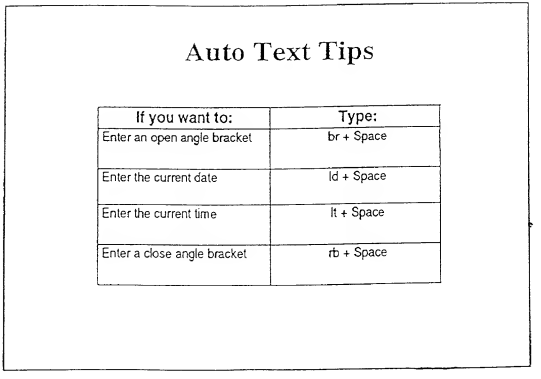


Figure 4

Figure 5



Auto Text Tips

If you want to:	Type:
Enter an open angle bracket	br + Space
Enter the current date	ld + Space
Enter the current time	lt + Space
Enter a close angle bracket	rb + Space

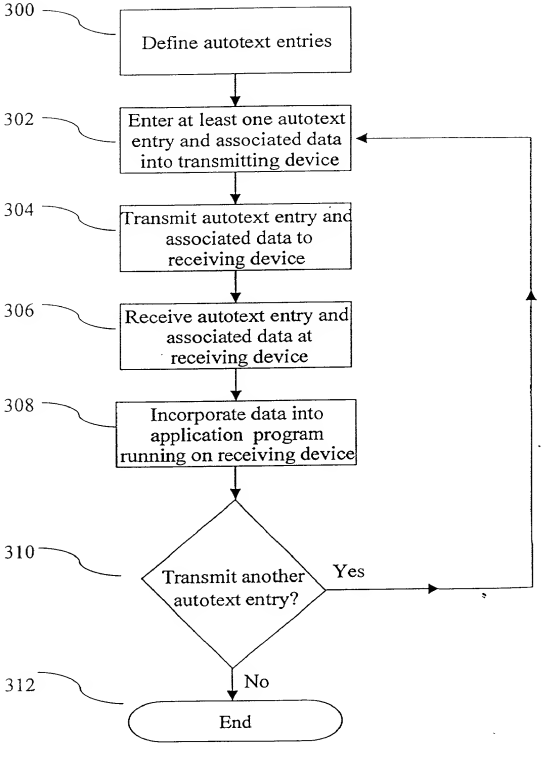

300
Define autotext entries
302
Enter at least one autotext entry and associated data into transmitting device
304
Transmit autotext entry and associated data to receiving device
306
Receive autotext entry and associated data at receiving device
308
Incorporate data into application program running on receiving device
310
Transmit another autotext entry?
Yes
No
312
End

Figure 6

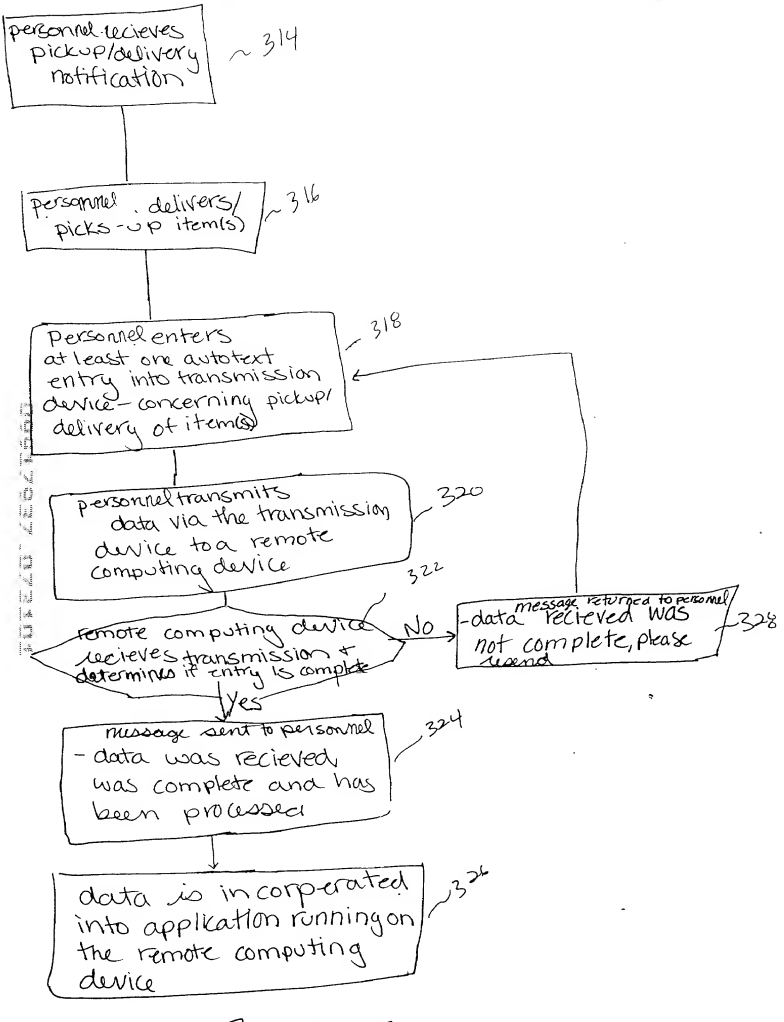

personnel recieves pickup/delivery notification
314
personnel delivers/ picks-up item(s)
316
Personnel enters at least one autotext entry into transmission device - concerning pickup/ delivery of item(s)
318
personnel transmits data via the transmission device to a remote computing device
320
remote computing device recieves transmission + determines if entry is complete
322
No
message returned to personnel - data recieved was not complete, please resend
328
Yes
message sent to personnel - data was recieved, was complete and has been processed
324
data is incorperated into application running on the remote computing device
326

Figure 7

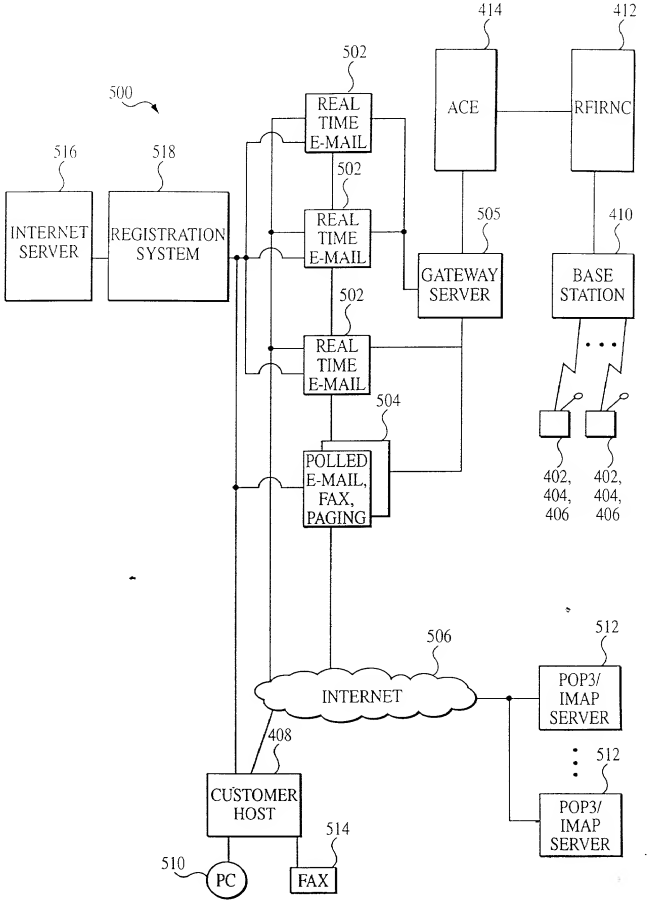

500
502
REAL TIME E-MAIL
502
REAL TIME E-MAIL
502
REAL TIME E-MAIL
504
POLLED E-MAIL, FAX, PAGING
516
INTERNET SERVER
518
REGISTRATION SYSTEM
414
ACE
412
RFIRNC
505
GATEWAY SERVER
410
BASE STATION
402, 404, 406
402, 404, 406
506
INTERNET
512
POP3/ IMAP SERVER
512
POP3/ IMAP SERVER
408
CUSTOMER HOST
510
PC
514
FAX

FIG. 8

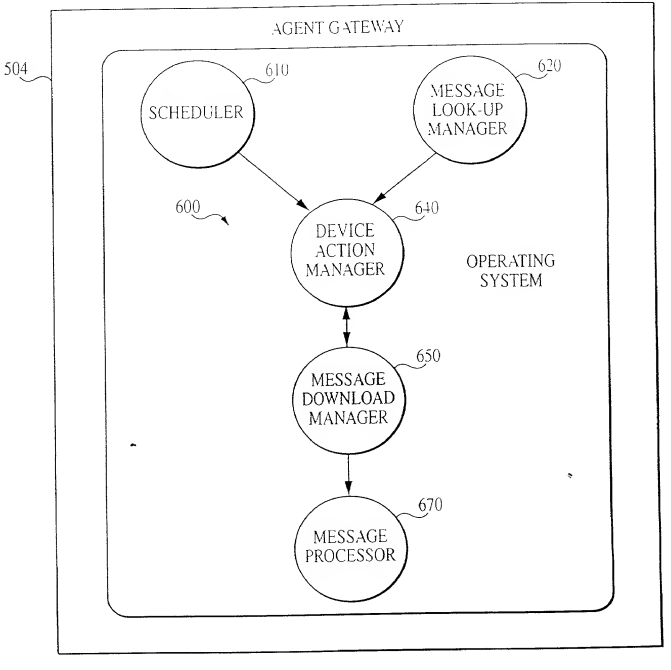

AGENT GATEWAY
504
SCHEDULER
610
MESSAGE LOOK-UP MANAGER
620
600
DEVICE ACTION MANAGER
640
OPERATING SYSTEM
MESSAGE DOWNLOAD MANAGER
650
MESSAGE PROCESSOR
670

FIG. 9A

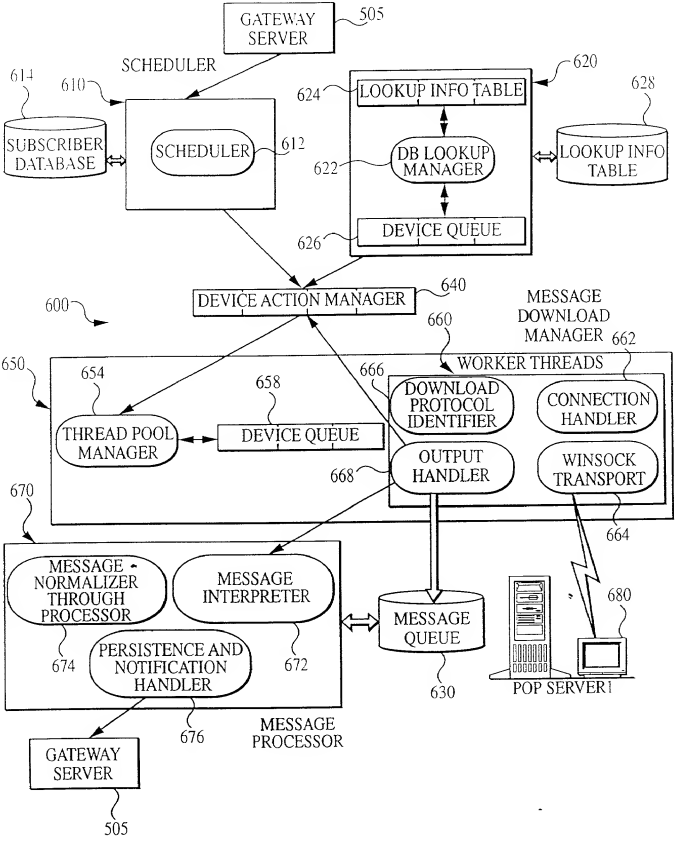

GATEWAY SERVER
505
SCHEDULER
614
610
620
624
LOOKUP INFO TABLE
628
SUBSCRIBER DATABASE
SCHEDULER
612
622
DB LOOKUP MANAGER
LOOKUP INFO TABLE
626
DEVICE QUEUE
600
DEVICE ACTION MANAGER
640
MESSAGE DOWNLOAD MANAGER
660
662
650
654
658
666
WORKER THREADS
DOWNLOAD PROTOCOL IDENTIFIER
CONNECTION HANDLER
THREAD POOL MANAGER
DEVICE QUEUE
668
OUTPUT HANDLER
WINSOCK TRANSPORT
670
664
MESSAGE NORMALIZER THROUGH PROCESSOR
MESSAGE INTERPRETER
680
MESSAGE QUEUE
674
PERSISTENCE AND NOTIFICATION HANDLER
672
630
POP SERVER1
676
MESSAGE PROCESSOR
GATEWAY SERVER
505

FIG. 9B

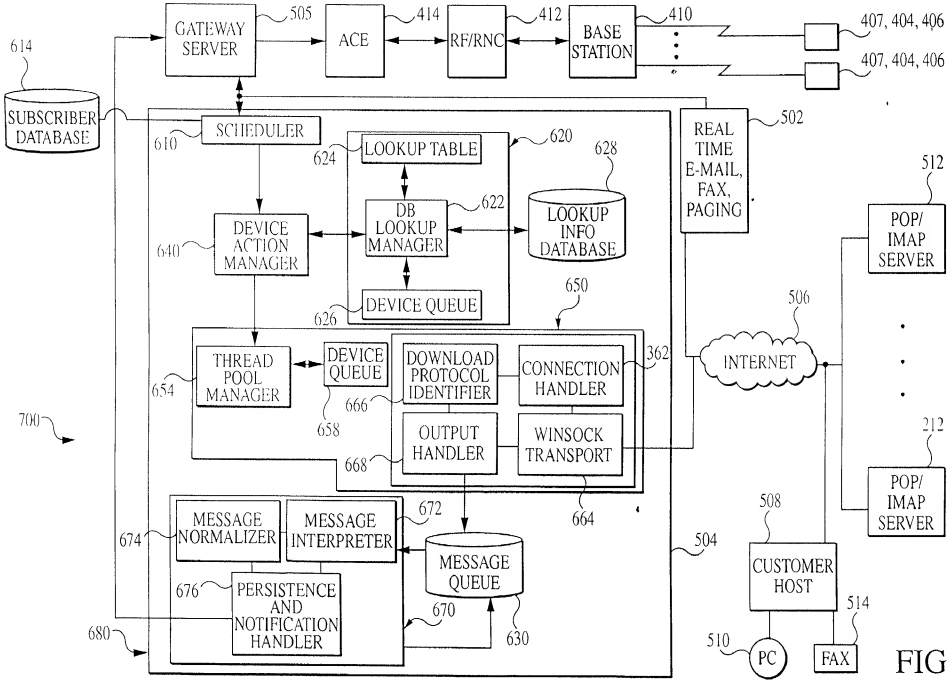

GATEWAY SERVER
505
ACE
414
RF/RNC
412
BASE STATION
410
407, 404, 406
407, 404, 406
614
SUBSCRIBER DATABASE
SCHEDULER
610
REAL TIME E-MAIL, FAX, PAGING
502
512
POP/ IMAP SERVER
620
624
LOOKUP TABLE
628
DB LOOKUP MANAGER
622
LOOKUP INFO DATABASE
DEVICE ACTION MANAGER
640
DEVICE QUEUE
626
650
506
INTERNET
THREAD POOL MANAGER
654
DEVICE QUEUE
658
DOWNLOAD PROTOCOL IDENTIFIER
666
CONNECTION HANDLER
362
OUTPUT HANDLER
668
WINSOCK TRANSPORT
664
700
212
POP/ IMAP SERVER
508
MESSAGE NORMALIZER
674
MESSAGE INTERPRETER
672
MESSAGE QUEUE
504
CUSTOMER HOST
676
PERSISTENCE AND NOTIFICATION HANDLER
670
630
680
514
510
PC
FAX

FIG. 10

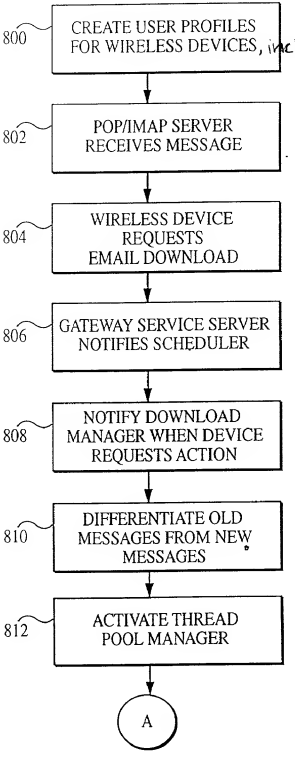

800
CREATE USER PROFILES FOR WIRELESS DEVICES, including autotext definitions
802
POP/IMAP SERVER RECEIVES MESSAGE
804
WIRELESS DEVICE REQUESTS EMAIL DOWNLOAD
806
GATEWAY SERVICE SERVER NOTIFIES SCHEDULER
808
NOTIFY DOWNLOAD MANAGER WHEN DEVICE REQUESTS ACTION
810
DIFFERENTIATE OLD MESSAGES FROM NEW MESSAGES
812
ACTIVATE THREAD POOL MANAGER
A

FIG. 11A

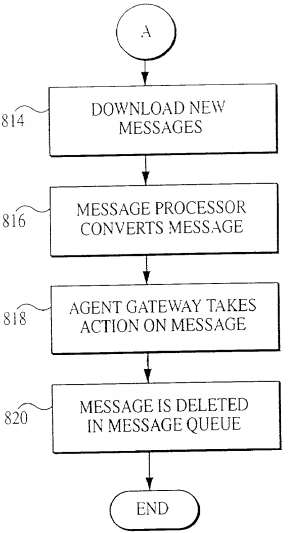

A
814
DOWNLOAD NEW MESSAGES
816
MESSAGE PROCESSOR CONVERTS MESSAGE
818
AGENT GATEWAY TAKES ACTION ON MESSAGE
820
MESSAGE IS DELETED IN MESSAGE QUEUE
END

FIG. 1B